2006-20-64-16.006

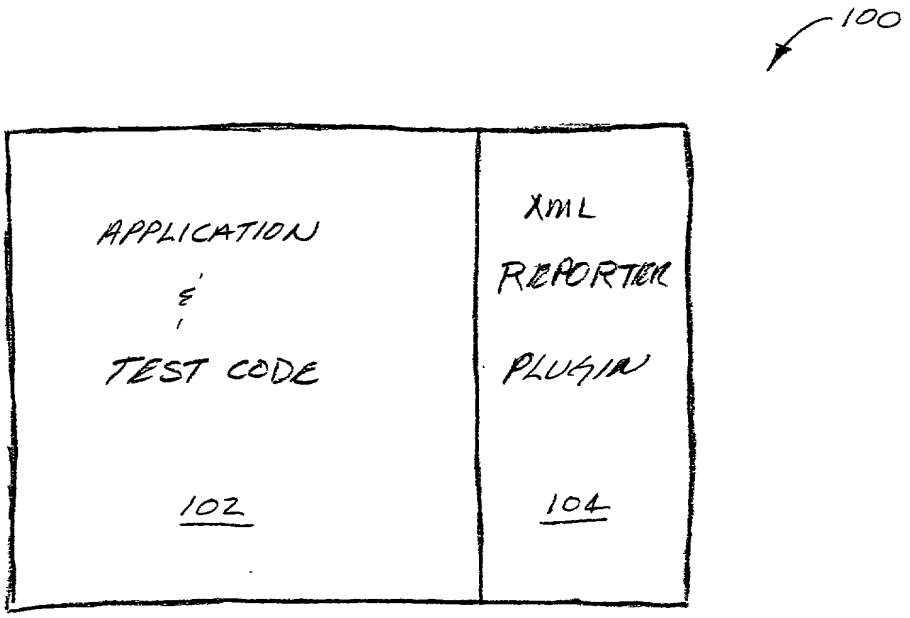

Fig. 1

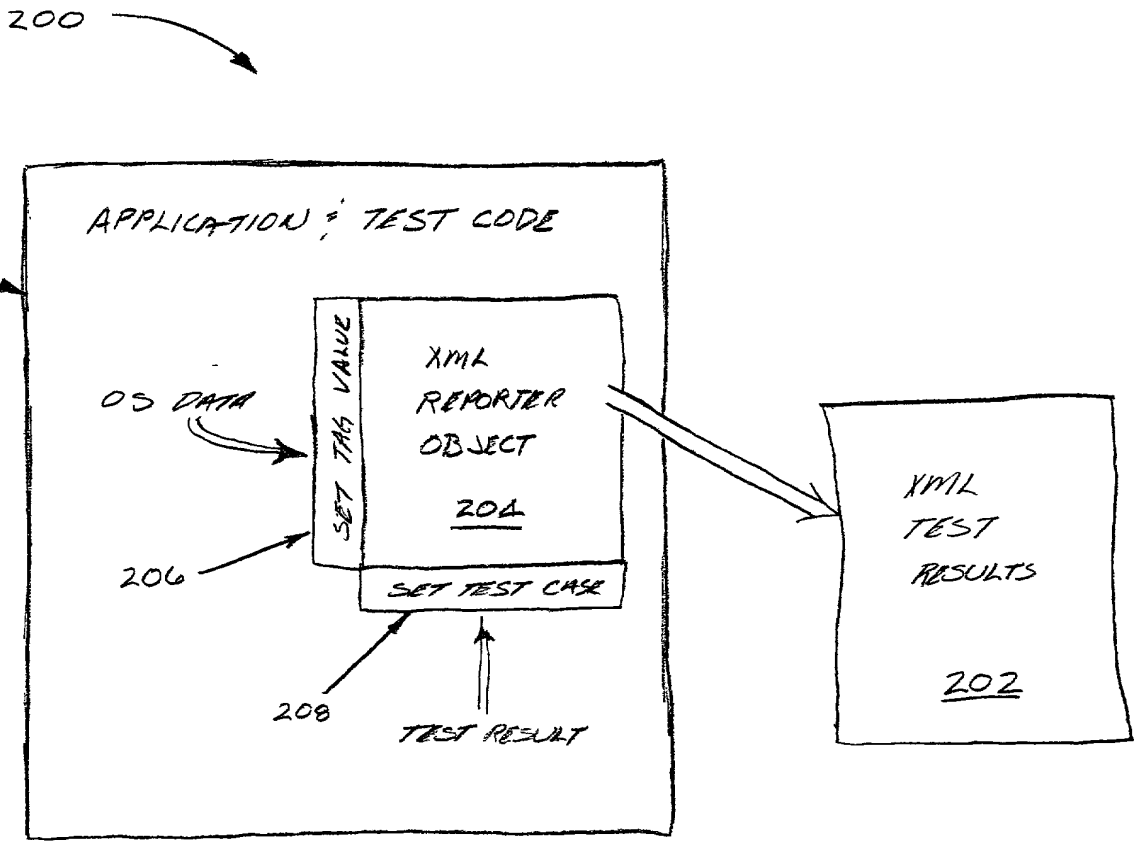

Fig. 2

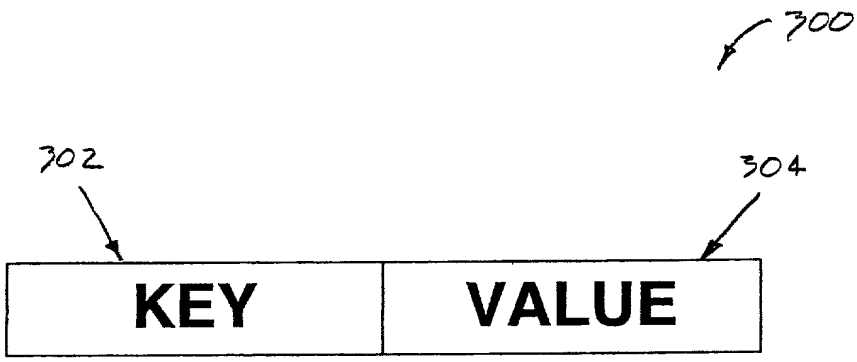

FIG. 3A

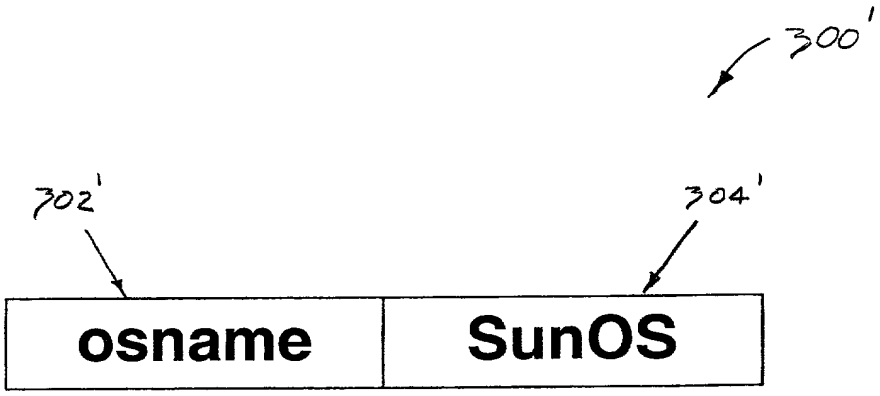

FIG. 3B

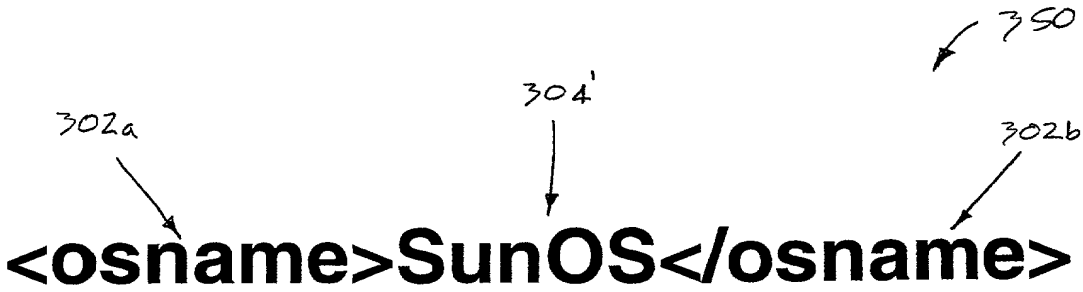

FIG. 3C

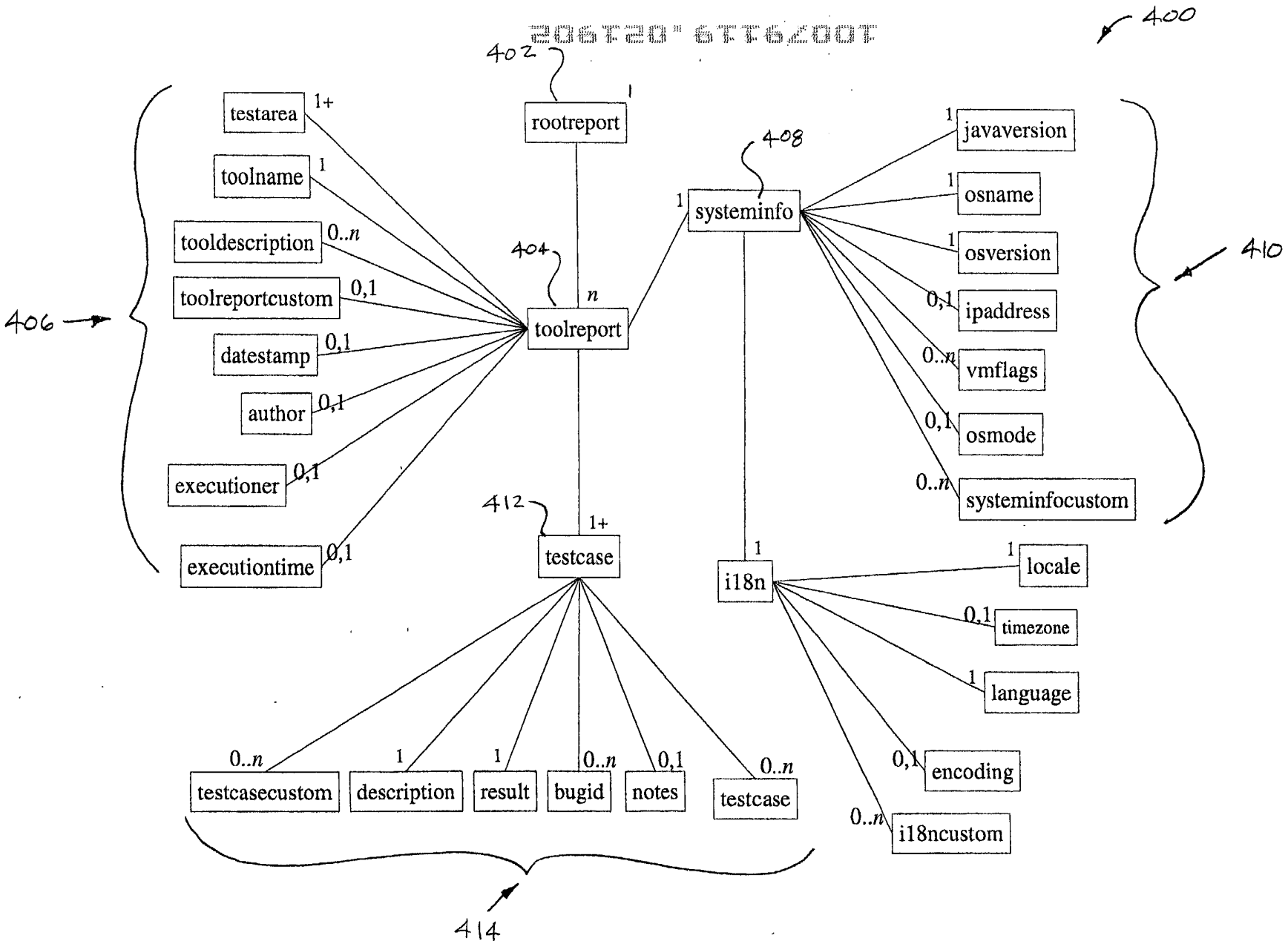
400
402
rootreport
1
404
toolreport
n
406
testarea
1+
toolname
1
tooldescription
0..n
toolreportcustom
0,1
datestamp
0,1
author
0,1
executioner
0,1
executiontime
0,1
408
systeminfo
1
410
javaversion
1
osname
1
osversion
1
ipaddress
0,1
vmflags
0..n
osmode
0,1
systeminfocustom
0..n
412
testcase
1+
i18n
1
locale
1
timezone
0,1
language
1
encoding
0,1
i18ncustom
0..n
testcasecustom
0..n
description
1
result
1
bugid
0..n
notes
0,1
testcase
0..n
414

Fig. 4

400'

```
<?xml version="1.0" standalone="yes"?>

<!DOCTYPE rootreport [
<!ELEMENT rootreport        (toolreport+)                                          >
<!ELEMENT toolreport        (testarea+, toolname, tooldescription,
                             systeminfo, toolreportcustom*, testcase+,
                             datestamp?, author?, executioner?, executiontime?)>
<!ELEMENT testarea          (#PCDATA)                                              >
<!ELEMENT toolname          (#PCDATA)                                              >
<!ELEMENT tooldescription   (#PCDATA)                                              >
<!ELEMENT toolreportcustom  (#PCDATA)                                              >
<!ATTLIST toolreportcustom  key  CDATA   #REQUIRED                                 >
<!ELEMENT datestamp         (#PCDATA)                                              >
<!ELEMENT author            (#PCDATA)                                              >
<!ELEMENT executioner       (#PCDATA)                                              >
<!ELEMENT executiontime     (#PCDATA)                                              >
<!ELEMENT testcase          (testcasecustom*, description, result, bugid*,
                             notes?, testcase*)                                    >
<!ELEMENT testcasecustom    (#PCDATA)                                              >
<!ATTLIST testcasecustom    key   CDATA   #REQUIRED                                >
<!ELEMENT description       (#PCDATA)                                              >
<!ELEMENT result            (#PCDATA)                                              >
<!ELEMENT bugid             (#PCDATA)                                              >
<!ELEMENT notes             (#PCDATA)                                              >
<!ELEMENT systeminfo        (javaversion, osname, osversion, i18n, ipaddress?,
                             vmflags*, osmode?, systeminfocustom*)                 >
<!ELEMENT javaversion       (#PCDATA)                                              >
<!ELEMENT osname            (#PCDATA)                                              >
<!ELEMENT osversion         (#PCDATA)                                              >
<!ELEMENT ipaddress         (#PCDATA)                                              >
<!ELEMENT vmflags           (#PCDATA)                                              >
<!ELEMENT osmode            (#PCDATA)                                              >
<!ELEMENT systeminfocustom  (#PCDATA)                                              >
<!ATTLIST systeminfocustom  key   CDATA   #REQUIRED                                >
<!ELEMENT i18n              (locale, timezone?, language, encoding?,
                             i18ncustom*)                                          >
<!ELEMENT locale            (#PCDATA)                                              >
<!ELEMENT timezone          (#PCDATA)                                              >
<!ELEMENT language          (#PCDATA)                                              >
<!ELEMENT encoding          (#PCDATA)                                              >
<!ELEMENT i18ncustom        (#PCDATA)                                              >
<!ATTLIST i18ncustom        key   CDATA  #REQUIRED                                 >
]>
```

402 404 406 412 414 408 410

Fig. 5

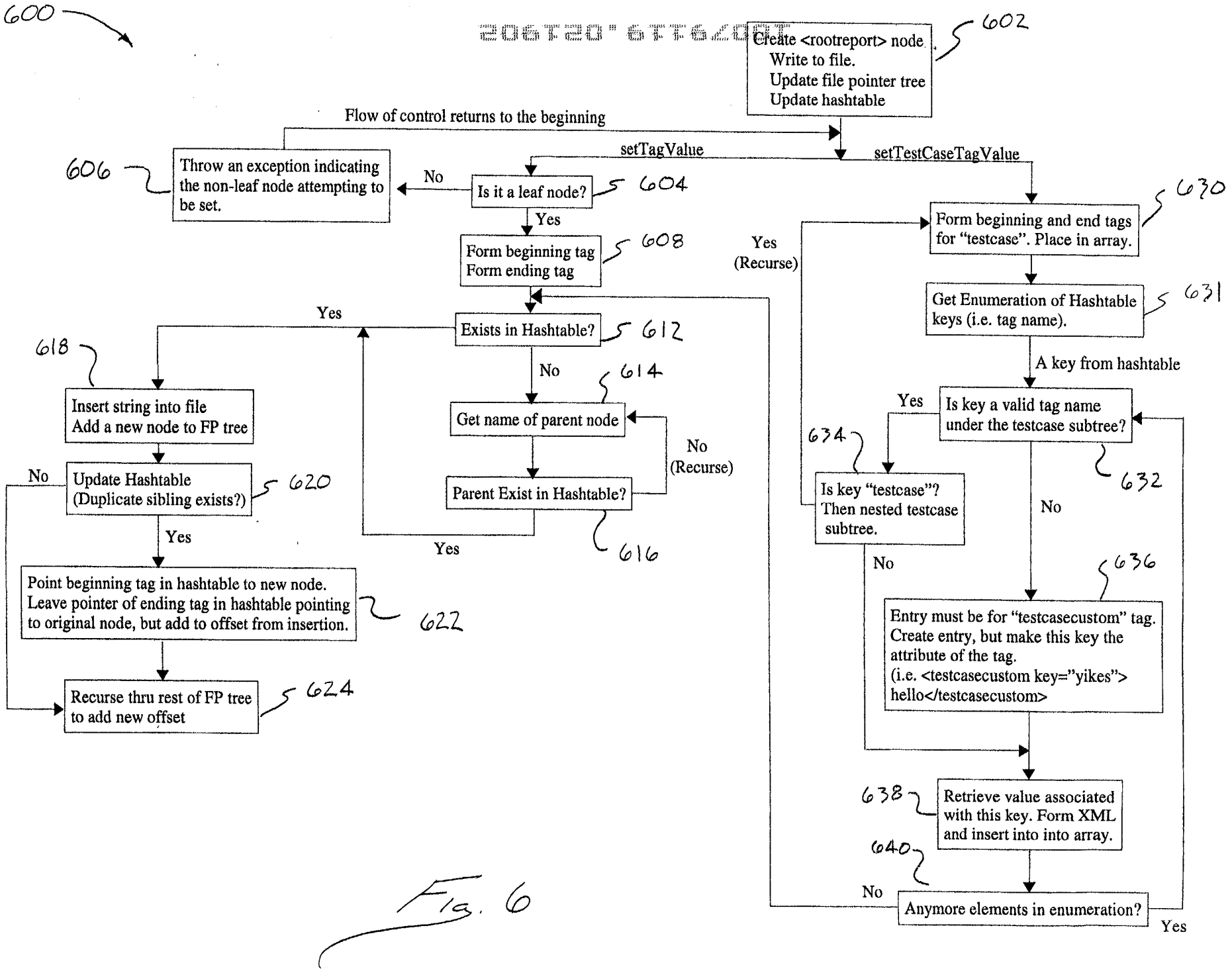
600
Create <rootreport> node
Write to file.
Update file pointer tree
Update hashtable
602
Flow of control returns to the beginning
setTagValue
setTestCaseTagValue
606
Throw an exception indicating the non-leaf node attempting to be set.
No
Is it a leaf node?
604
Yes
Form beginning tag
Form ending tag
608
Yes
(Recurse)
630
Form beginning and end tags for "testcase". Place in array.
631
Get Enumeration of Hashtable keys (i.e. tag name).
A key from hashtable
Yes
Exists in Hashtable?
612
618
No
614
Get name of parent node
Yes
Is key a valid tag name under the testcase subtree?
634
632
Insert string into file
Add a new node to FP tree
No
(Recurse)
Is key "testcase"?
Then nested testcase subtree.
No
Update Hashtable
(Duplicate sibling exists?)
620
Parent Exist in Hashtable?
616
Yes
Yes
No
636
Point beginning tag in hashtable to new node.
Leave pointer of ending tag in hashtable pointing to original node, but add to offset from insertion.
622
Entry must be for "testcasecustom" tag.
Create entry, but make this key the attribute of the tag.
(i.e. <testcasecustom key="yikes">
hello</testcasecustom>
638
Retrieve value associated with this key. Form XML and insert into into array.
640
No
Anymore elements in enumeration?
Yes
Recurse thru rest of FP tree to add new offset
624

Fig. 6

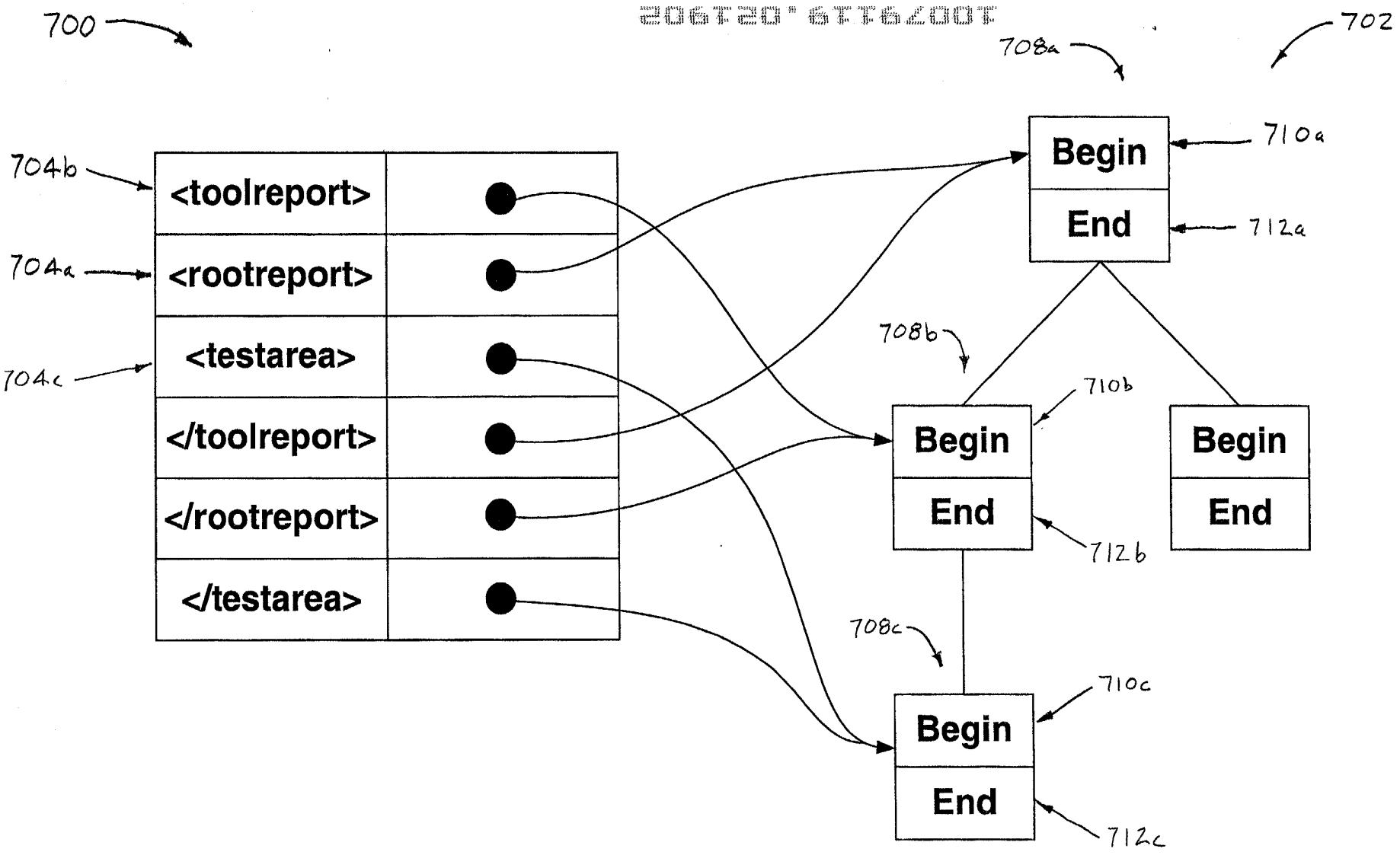
700
702
708a
704b
<toolreport>
704a
<rootreport>
704c
<testarea>
</toolreport>
</rootreport>
</testarea>
Begin
End
710a
712a
708b
Begin
End
710b
712b
Begin
End
708c
Begin
End
710c
712c

FIG. 7

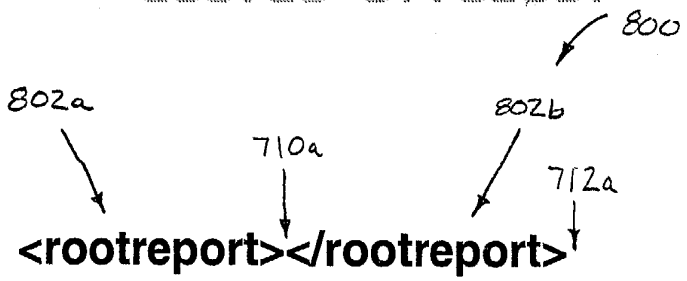

FIG. 8A

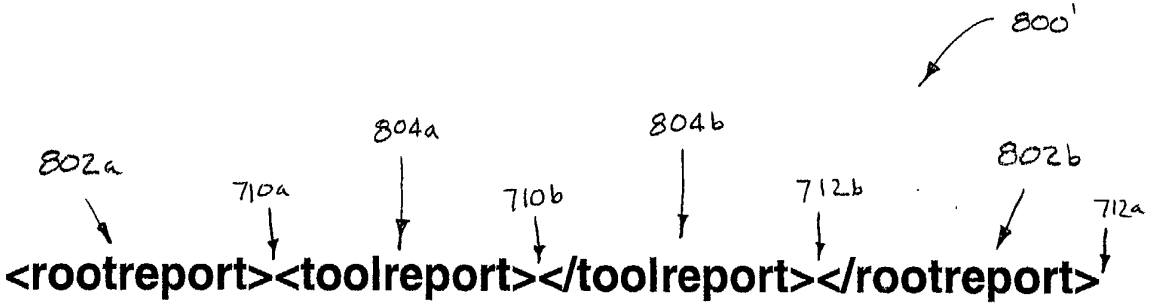

FIG. 8B

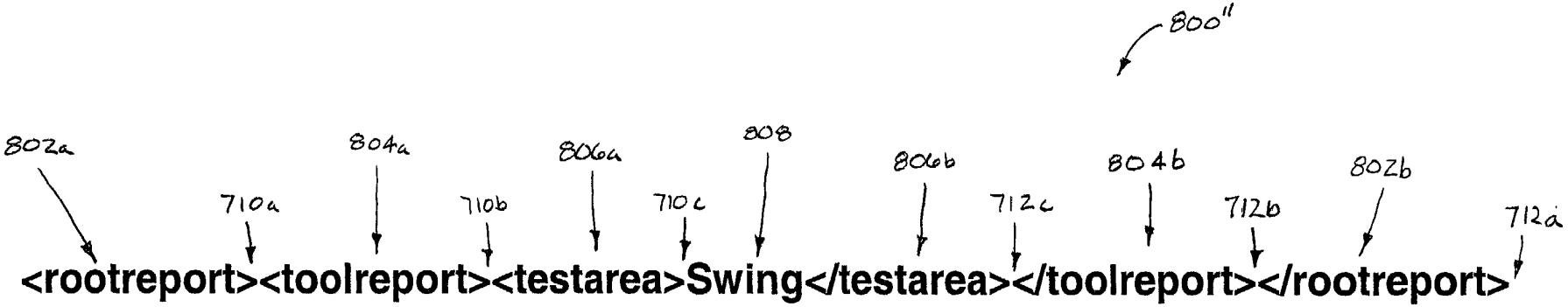

FIG. 8C

20120 64 05.047

900

```
<?xml version="1.0"?>
<rootreport>
  <toolreport>
    <testarea>I18N</testarea>
    <testarea>AWT</testarea>
    <testarea>Swing</testarea>
    <toolname>Ugly Stick</toolname>
    <tooldescription>Beaten</tooldescription>
    <systeminfo>
      <javaversion>Merlin B19</javaversion>
      <osname>SunOS</osname>
      <osversion>2.8</osversion>
      <i18n>
        <locale>US</locale>
        <timezone>US/Pacific</timezone>
        <language>en</language>
        <encoding>UTF-8</encoding>
      </i18n>
      <ipaddress>129.145.160.72</ipaddress>
    </systeminfo>
    <testcase>
      <testcasecustom key="yikes">hello</testcasecustom>
      <description>none</description>
      <result>FAIL</result>
      <bugid>398434</bugid>
      <notes>This is rad</notes>
    </testcase>
    <datestamp>Fri Nov 02 10:06:13 PST 2001</datestamp>
    <executiontime>0:0:2</executiontime>
  </toolreport>
</rootreport>
```

802a
804a
806b
806a
408
412
804b
802b

Fig 9